

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Cancelled).

2. (Previously Presented) The compound of claim 5 wherein n is an integer from 0 to 8.

Claims 3-4. (Cancelled).

5. (Currently Amended) A compound comprising:

(1) a therapeutic agent capable of entering a target cell, wherein said therapeutic agent is an alkylating agent, antiproliferative agent, tubulin binding agent, vinca alkaloid, enediyne, podophyllotoxin, podophyllotoxin derivative, a member of the pteridine family of drugs, taxane, dolastatins, topoiosomerase inhibitor, or a platinum complex chemotherapeutic agent,

(2) an oligopeptide of the formula $(AA)_n-AA^4-AA^3-AA^2-AA^1$, wherein:

each AA independently represents an amino acid,

n is an integer from 0 to 16,

AA⁴ represents β -alanine, thiazolidine-4-carboxylic acid, 2-thienylalanine, 2-naphthylalanine, D-alanine, D-leucine, D-methionine, D-phenylalanine, 3-amino-3-phenylpropionic acid, γ -aminobutyric acid, 3-amino-4,4-diphenylbutyric acid, tetrahydroisoquinoline-3-carboxylic acid, 4-aminomethylbenzoic acid, and aminoisobutyric acid,

AA³ represents any amino acid,

AA² represents any amino acid, and

AA¹ represents any amino acid,

(3) a negatively charged stabilizing group, and

(4) optionally, a linker group not cleavable by TOP,

wherein the oligopeptide is directly linked to the stabilizing group at the amino terminus of the oligopeptide and the oligopeptide is directly linked to the therapeutic agent or indirectly linked through the linker group to the therapeutic agent at a second attachment site of the oligopeptide,

wherein the stabilizing group reduces acute toxicity of the compound when administered *in vivo*, and
wherein the compound is cleavable by TOP.

Claims 6-12. (Cancelled)

13. **(Previously Presented)** The compound of claim 5 wherein the oligopeptide is selected from the group consisting of: D-AlaThi β Ala β AlaLeuAlaLeu (SEQ ID NO: 1), Thi β Ala β AlaLeuAlaLeu (SEQ ID NO: 2), β Ala β AlaLeuAlaLeu (SEQ ID NO: 3), β AlaLeuTyrLeu (SEQ ID NO: 17), β AlaLeuThiLeu (SEQ ID NO: 18), β AlaLeuThrLeu (SEQ ID NO: 21), β AlaLeuSerLeu (SEQ ID NO: 22), β AlaLeuPyrLeu (SEQ ID NO: 23), β AlaLeuLeuLeu (SEQ ID NO: 24), β AlaLeuGlyLeu (SEQ ID NO: 28), β AlaLeuPheLeu (SEQ ID NO: 31), β AlaLeuAibLeu (SEQ ID NO: 32), and β AlaLeuAlaLeu (SEQ ID NO: 38).

14. **(Original)** The compound of claim 5 wherein AA¹ of the oligopeptide is selected from the group consisting of Leucine, Phenylalanine, Isoleucine, Alanine, Glycine, Tyrosine, 2-Naphthylalanine, Serine, p-Cl-phenylalanine, p-Nitrophenylalanine, 1-Naphthylalanine, Threonine, Homoserine, Cyclohexylalanine, Thienylalanine, Homophenylalanine, Norleucine, and β -Alanine.

15. **(Original)** The compound of claim 5 wherein AA² of the oligopeptide is selected from the group consisting of Alanine, Leucine, Tyrosine, Glycine, Serine, 3-Pyridylalanine, 2-Thienylalanine, Norleucine, Homoserine, Homophenylalanine, p-Cl-phenylalanine, p-Nitrophenylalanine, Aminoisobutyric Acid, Threonine, and Phenylalanine.

16. **(Original)** The compound of claim 5 wherein AA³ of the oligopeptide is selected from the group consisting of Leucine, Tyrosine, Phenylalanine, p-Cl-Phenylalanine, p-Nitrophenylalanine, Valine, Norleucine, Norvaline, Phenylglycine, Tryptophan, Tetrahydroisoquinoline-3-carboxylic acid, 3-Pyridylalanine, Alanine, Glycine, Thienylalanine, Methionine, Valine, and Proline.

17. **(Cancelled).**

18. **(Original)** The compound of claim 5 wherein the stabilizing group is a dicarboxylic or higher order carboxylic acid.

19. **(Previously Presented)** The compound of claim 5 wherein the stabilizing group is selected from the group consisting of: succinic acid, adipic acid, glutaric acid, phthalic acid, diglycolic acid, fumaric acid, naphthalene dicarboxylic acid, 1,8-naphthyl dicarboxylic acid, aconitic acid, carboxycinnamic acid, triazole dicarboxylic acid, butane disulfonic acid, and maleic acid.

20. **(Withdrawn)** The compound of claim 5 wherein the stabilizing group is a non-genetically encoded amino acid having four or more carbons.

21. **(Withdrawn)** The compound of claim 5 wherein the stabilizing group is one of aspartic acid linked to the oligopeptide at the β -carboxy group of the aspartic acid or glutamic acid linked to the oligopeptide at the γ -carboxy group of the glutamic acid.

22-24. **(Cancelled)**.

25. **(Original)** The compound of claim 5 wherein the therapeutic agent is selected from the group consisting of Doxorubicin, Daunorubicin, Vinblastine, Vincristine, Calicheamicin, Etoposide, Etoposide phosphate, CC-1065, Duocarmycin, KW-2189, Methotrexate, Methopterin, Aminopterin, Dichloromethotrexate, Docetaxel, Paclitaxel, Epithiolone, Combretastatin, Combretastatin A4 Phosphate, Dolastatin 10, Dolastatin 11, Dolastatin 15, Topotecan, Camptothecin, Mitomycin C, Porfiromycin, 5-Fluorouracil, 6-Mercaptopurine, Fludarabine, Tamoxifen, Cytosine arabinoside, Adenosine arabinoside, Colchicine, Cisplatin, Carboplatin, Mitomycin C, Bleomycin, Melphalan, Chloroquine, Cyclosporin A, a derivative of any of the foregoing, and an analog of any of the foregoing.

26. **(Original)** The compound of claim 5 wherein the oligopeptide is directly linked to the therapeutic agent.

27. **(Withdrawn)** The compound of claim 5 wherein the oligopeptide sequence is indirectly linked to the therapeutic agent at the second attachment site of the oligopeptide

via a linker group, the linker group selected from the group consisting of amino caproic acid, a hydrazide group, an ester group, an ether group, and a sulphydryl group.

28. **(Previously Presented)** A compound selected from the group consisting of Suc- β Ala-Leu-Ala-Leu-Dox, Suc- β Ala-Leu-Ala-Leu-Dnr, and Glutaryl- β Ala-Leu-Ala-Leu-Dox.

Claims 29-36. **(Cancelled)**.

37. **(Currently Amended)** A pharmaceutical composition comprising

(1) a compound comprising:

(a) a therapeutic agent capable of entering a target cell, wherein said therapeutic agent is an alkylating agent, antiproliferative agent, tubulin binding agent, vinca alkaloid, enediyne, podophyllotoxin, podophyllotoxin derivative, a member of the pteridine family of drugs, taxane, dolastatins, topoiosomerase inhibitor, or a platinum complex chemotherapeutic agent,

(b) an oligopeptide of the formula $(AA)_n-AA^4-AA^3-AA^2-AA^1$, wherein:

each AA independently represents an amino acid,

n is an integer from 0 to 16,

AA⁴ represents β -alanine, thiazolidine-4-carboxylic acid, 2-thienylalanine, 2-naphthylalanine, D-alanine, D-leucine, D-methionine, D-phenylalanine, 3-amino-3-phenylpropionic acid, γ -aminobutyric acid, 3-amino-4,4-diphenylbutyric acid, tetrahydroisoquinoline-3-carboxylic acid, 4-aminomethylbenzoic acid, and aminoisobutyric acid,

AA³ represents any amino acid,

AA² represents any amino acid, and

AA¹ represents any amino acid,

(c) a negatively charged stabilizing group, and

(d) optionally, a linker group not cleavable by TOP,

wherein the oligopeptide is directly linked to the stabilizing group at the amino terminus of the oligopeptide and the oligopeptide is directly linked to the therapeutic agent or indirectly linked through the linker group to the therapeutic agent at a second attachment site of the oligopeptide,

wherein the stabilizing group reduces acute toxicity of the compound when administered *in vivo*, and

wherein the compound is cleavable by TOP,

and (2) a pharmaceutically acceptable carrier.

38-117. **(Cancelled).**

118. **(Previously Presented)** The compound of claim 5 wherein the oligopeptide is β Ala-Leu-Ala-Leu (SEQ ID NO: 38).

119. **(Previously Presented)** The compound of claim 28 wherein the compound is Suc- β Ala-Leu-Ala-Leu-Dox.

120. **(Previously Presented)** A pharmaceutical composition comprising the compound of claim 119 and a pharmaceutically acceptable carrier.

Claims 121-125. **(Cancelled).**

126. **(Previously Presented)** The compound of claim 2 wherein n is 0.

Claims 127-129. **(Cancelled).**

130. **(Previously Presented)** The pharmaceutical composition of claim 37 wherein n is 0.

131. **(Previously Presented)** The pharmaceutical composition of claim 37 wherein the stabilizing group is selected from the group consisting of: succinic acid, adipic acid, and glutaric acid.

Claims 132-134 **(Cancelled).**

135. **(New)** The pharmaceutical composition of claim 37 wherein the therapeutic agent is selected from the group consisting of Doxorubicin, Daunorubicin, Vinblastine, Vincristine, Calicheamicin, Etoposide, Etoposide phosphate, CC-1065, Duocarmycin, KW-2189, Methotrexate, Methopterin, Aminopterin, Dichloromethotrexate, Docetaxel, Paclitaxel, Epithiolone, Combretastatin, Combretastatin A4 Phosphate, Dolastatin 10, Dolastatin 11, Dolastatin 15, Topotecan, Camptothecin, Mitomycin C, Porfiromycin, 5-Fluorouracil, 6-Mercaptopurine, Fludarabine, Tamoxifen, Cytosine arabinoside, Adenosine arabinoside, Colchicine, Cisplatin, Carboplatin, Mitomycin C, Bleomycin, Melphalan, Chloroquine, Cyclosporin A, a derivative of any of the foregoing, and an analog of any of the foregoing.

136. (New) The pharmaceutical composition of claim 37 wherein the oligopeptide is selected from the group consisting of: D-AlaThi β Ala β AlaLeuAlaLeu (SEQ ID NO: 1), Thi β Ala β AlaLeuAlaLeu (SEQ ID NO: 2), β Ala β AlaLeuAlaLeu (SEQ ID NO: 3), β AlaLeuTyrLeu (SEQ ID NO: 17), β AlaLeuThiLeu (SEQ ID NO: 18), β AlaLeuThrLeu (SEQ ID NO: 21), β AlaLeuSerLeu (SEQ ID NO: 22), β AlaLeuPyrLeu (SEQ ID NO: 23), β AlaLeuLeuLeu (SEQ ID NO: 24), β AlaLeuGlyLeu (SEQ ID NO: 28), β AlaLeuPheLeu (SEQ ID NO: 31), β AlaLeuAibLeu (SEQ ID NO: 32), and β AlaLeuAlaLeu (SEQ ID NO: 38).